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| Application No.   | Applicant(s)       |
|-------------------|--------------------|
| 09/448,927        | WELLINGHOFF ET AL. |
| Examiner          | Art Unit           |
| Joseph D. Anthony | 1714               |

Rejected Allowed

(Through numeral) Cancelled Restricted

Non-Elected Interference

**Appeal** Α 0 Objected

|     | Cla      | aim_            |                |         | D              | ate      |        |                      |           | -           | Cta          | im          |          |          |          | Dat                | e        |                         |   | CI       | aim        |                  |              |              | ate                   |          | _        |          |
|-----|----------|-----------------|----------------|---------|----------------|----------|--------|----------------------|-----------|-------------|--------------|-------------|----------|----------|----------|--------------------|----------|-------------------------|---|----------|------------|------------------|--------------|--------------|-----------------------|----------|----------|----------|
|     |          | - m             | 4              |         | ΙT             |          |        |                      |           |             | _ ]          | æ           |          |          |          |                    |          |                         |   | _        | - F        |                  | 1            |              |                       | -        |          |          |
|     | Final    | 層               | 7/29/04        |         |                | -        |        |                      |           |             | Final        | ig.         |          | -        |          | -                  |          |                         |   | Final    | ë          |                  |              |              |                       |          |          |          |
|     | Œ.       | Original        | 2              |         | 1              |          | 1      |                      |           |             | u.           | Original    |          |          |          | 1                  | 1        |                         |   | -        | Original   |                  |              |              |                       |          |          |          |
|     |          | (1)             | 1              | +-      | H              | +        | +-     | Н                    | ۲,        | ار.         |              |             | N        | Ч        | +        | +                  | Н        | +                       | +-1                                     | <b>—</b> | 101        | $\vdash$         | +            | Н            | H                     | -+       | +        | ┯        |
|     | $\vdash$ | 2               | 1              | +-      | H              | +        | +      | Н                    |           | 4           |              | 52          | 4        | -        | $\dashv$ | ╅                  | Н        | $\dashv$                | +                                       | -        | 102        | $\vdash$         | ╅            | Н            | $\vdash$              | +        | +        | $\dashv$ |
|     |          | 3               | H              | +       | Н              | +        | +      | Н                    | $\dashv$  | П           |              | 53          | Н        | ┪        | $\dashv$ | +                  | Н        | $\dashv$                | +                                       |          | 103        |                  | 1            | Н            | Н                     | -        | +        | $\top$   |
|     |          | 4               | 111            | +       | Н              | $\vdash$ | $\top$ | П                    | ┪         | П           |              | 54          | Н        | -1       | 1        | $\top$             | П        | _                       | $\dashv$                                |          | 104        |                  | $\top$       |              | $\Box$                | ┪        | 十        | $\top$   |
|     |          | 5               | $\Pi$          |         |                |          |        |                      | $\Box$    | П           |              | 55          |          | コ        |          | $\perp$            |          | $\Box$                  | Ш                                       |          | 105        |                  |              |              |                       |          | 工        | $\perp$  |
|     |          | 6               | Ш              | Τ       |                |          |        |                      | $\Box$    | П           |              | 56          |          |          |          |                    |          |                         | $\Box$                                  |          | 106        |                  |              |              |                       |          | $\perp$  | $\perp$  |
|     |          | ス               | Ш              |         | Ш              | _        |        | Ц                    | _         | П           |              | 57          | Ш        | _        | _        | _                  | Ш        | 4                       | Ш                                       |          | 107        | $\sqcup$         | 1            | $\sqcup$     | Ш                     | _        | 4        |          |
|     | <u> </u> | <u>(8)</u>      | Ш              | _       | $\sqcup$       | +        | 1      | Н                    | _         | П           | -            | 28          | Ш        |          | -        | +                  | Н        |                         | -1-1                                    | <u> </u> | 108        | $\vdash$         | ᅪ            | $\vdash$     | $\vdash$              |          | +        | —        |
|     | $\vdash$ | 9               | ++-            | +       | ⊢⊦             | +        | +      | ${oldsymbol{ee}}$    | -1        |             | -            | <u>(59)</u> | Н        |          | $\dashv$ |                    | $\vdash$ | -                       | +                                       | $\vdash$ | 109        | $\vdash$         | +            | $\vdash$     | ${oldsymbol{ec{H}}}$  | ┥        | ╅        |          |
|     | -        | 10<br>(1)       | W              | +-      | <del>   </del> | +        | ╂      | $\vdash$             | $\dashv$  | П           | -            | 61          | +        | $\dashv$ | $\dashv$ | +                  | Н        | +                       | +                                       | $\vdash$ | 111        | $\vdash$         | +            | $\vdash$     | Н                     | -+       | +        | +        |
| W/D | <u> </u> |                 | X              | ╫       | $\vdash$       | +        | ╅      | Н                    | $\dashv$  | П           |              | 62          | Н        | $\dashv$ | $\dashv$ | +                  | +        | -+                      | +                                       | -        | 112        | $\vdash$         | +            | $\vdash$     | Н                     | +        | +        | +        |
| 1   |          | 13              | M              | +       | $\dag \dagger$ | $\dashv$ | +      | $\vdash \vdash$      | $\dashv$  |             |              | 63          | Н        | $\dashv$ | +        | +                  | +        | $\dashv$                | +                                       |          | 113        | $\vdash$         | $\top$       | $\vdash$     | H                     | 寸        | $\top$   | $\top$   |
|     |          | 14              | $\Pi$          | 1       | П              | $\top$   | 1      | П                    | 乛         |             |              | 64          | П        | П        | T        |                    | П        |                         | $\top$                                  |          | 114        |                  | T            |              |                       | J        | I        |          |
|     |          | 15              |                |         | □              |          | oxdot  |                      |           | $\parallel$ |              | 65          |          |          |          | I                  |          |                         |   |          | 115        |                  |              |              |                       | $\Box$   | $\Box$   | $\perp$  |
| 1   |          | 16              | Ш              |         | $\Box$         |          |        | П                    |           |             |              | 66          | Ш        |          | $\bot$   | $\perp$            | $\Box$   | $\Box$                  |   |          | 116        | Ш                | <u> </u>     |              |                       | $\Box$   | $\perp$  |          |
| 1   |          | 17              | Ш              | ┸       | Ш              | _        | ┸      | Ц                    | _         | Н           |              | 67          | Ш        | _        | 4        |                    | Ш        | _                       | Ш                                       | <u> </u> | 117        | Ш                | $\bot$       |              | Ш                     | 4        | 4        | $\bot$   |
| - 1 |          | 18              | ш              | -       | $\sqcup$       | +        | +      | Н                    | _         | П           | $\dashv$     | 8           | Н        | _        | $\dashv$ | +-                 | Н        | 4                       | 44                                      | <b>—</b> | 118        | $\vdash$         | +            |              | Н                     |          | +        | -        |
| - 1 | <u> </u> | (3)             | Ш              | +       |                | -        | +      | Н                    | $\dashv$  |             |              | (S)<br>(S)  | Н        | -        | $\dashv$ | -                  | Н        | $\dashv$                | +                                       | -        | 119<br>120 | $\vdash$         | ╫            | $\vdash$     | Н                     |          | +        |          |
| - 1 | <b> </b> | 20              | ₩              | ┿       | $\vdash$       | +        |        | Н                    | $\dashv$  | П           |              | 8           | Н        | $\dashv$ | $\dashv$ | +                  | Н        | +                       | +                                       | $\vdash$ | 121        | $\vdash$         | +            |              | Н                     | $\dashv$ | +        | +-       |
| 1   | -        | 22              | HH             | +       | H              | +        | +      | Н                    | $\dashv$  |             | -            | (2)         | Н        | $\dashv$ | $\dashv$ | +                  | Н        | $\dashv$                | $\dashv$                                | $\vdash$ | 122        | $\vdash$         | +-           |              | Н                     | $\dashv$ | +        | +        |
| - 1 | $\vdash$ | 23              | Hi             | +       | H              | $\dashv$ | +      | Н                    | $\dashv$  | П           |              | <b>73</b>   | Н        | $\dashv$ | $\dashv$ | +                  | Н        | $\dashv$                | ++                                      | -        | 123        | $\vdash$         | +            | Н            | H                     | -        | +        | 1        |
| - 1 |          | (24)            | Ш              | +       | H              | ┪        | +      | Н                    | ┪         |             |              | (74)        | Н        |          | ┪        | $\top$             | П        |                         | $\dashv \dashv$                         |          | 124        |                  | 1            |              | П                     | 寸        | $\top$   | $\top$   |
|     |          | 25              |                |         |                |          |        | П                    |           | П           |              | (75)        |          |          |          |                    |          |                         |   |          | 125        |                  |              |              |                       |          | $\perp$  |          |
| 1   |          | 26              | Ш              |         |                |          | 工      |                      |           |             |              | 76          |          |          | $\Box$   |                    |          |                         | $\Box$                                  |          | 126        |                  | 1            |              |                       | $\Box$   | $\Box$   |          |
| 0   |          | 27              | Ш              |         | Ш              |          | ┸      | Ц                    |           | 1           |              | $\bigcirc$  |          |          | _        |                    | Ш        |                         | Ш                                       | <u> </u> | 127        | Щ                | 1_           | $oxed{oxed}$ | Ш                     | 4        | _        |          |
| 0   | <u></u>  | (28)            | ##             |         | $\sqcup$       |          | 1      | Ш                    | _         | 4/0         |              | (78)        | И        | Ш        | 4        | $\bot$             | Н        | $\dashv$                | 44                                      | <u> </u> | 128        | $\vdash \vdash$  | 4-           | _            | Ш                     |          | 4        | —        |
| - 1 | <u> </u> | (29)            | ₩              | +       | $\vdash$       | -        | 4—     | Н                    | $\dashv$  |             |              | 79          |          | $\dashv$ | +        | ┿                  | $\vdash$ | +                       | +                                       | - ⊢      | 129        | ╟┼               |              | -            | Н                     | -+       | +        | —        |
| 1   | <u> </u> | $\frac{30}{31}$ | ₩              | +       | 1 1            |          |        | Н                    | $\dashv$  |             |              | 80<br>81    | Н        | $\dashv$ | $\dashv$ | +                  | Н        | $\dashv$                | +                                       | -        | 130        | ┝                |              | -            | ┝┥                    | -        | +        |          |
| - 1 | $\vdash$ | (32)            | ╫┼             | +       | H              | +        | +      | Н                    | $\dashv$  |             | -            | 82          | Н        | $\vdash$ | +        | +                  | Н        | -+                      | +                                       | -        | 132        | H                | +-           | -            | Н                     | -        | +        | +        |
| 1   | $\vdash$ | (33)            | Ш              | +       | Н              | +        | +      | H                    | $\exists$ |             |              | 83          |          |          | 十        | +                  | Н        | $\dashv$                | +                                       | -        | 133        | $\vdash$         | +-           | -            | Н                     | _        | $\dashv$ | +        |
| - 1 | $\vdash$ | (34)            | Ш              | +       | Н              | 1        | 十      | Н                    | $\exists$ |             |              | 84          |          |          | $\dashv$ | 十                  | П        | $\dashv$                |   |          | 134        | H                | +            |              | Н                     |          | $\top$   | 十        |
| 1   |          | (35)            | $\Pi \uparrow$ |         | 口              | 丁        | 1      |                      |           |             |              | 85          |          |          |          |                    | П        | $\Box$                  |   |          | 135        |                  | 1            |              |                       |          | 丁        | 工        |
|     |          | (36)            | Ш              |         | П              | I        | I      |                      |           |             |              | 86          |          |          | $\Box$   | I                  | П        |                         |   |          | 136        | $\Box$           | L            |              |                       | $\Box$   | I        |          |
| -   |          | 37              | Y              |         | П              | _[_      | $\bot$ | Ш                    | _         |             |              | 87          | Ш        |          | 4        | 4                  | $\sqcup$ |                         | $\Box$                                  | <u> </u> | 137        | igsqcut          | 1-           | <u> </u>     | Ц                     | [        | $\bot$   | $\bot$   |
| - 1 |          | (38)            | Y.             | $\bot$  | $\sqcup$       | 4        | ╀      | ⊢                    | $\dashv$  |             | $oxed{oxed}$ | 88          | Ш        |          | 4        |                    | $\sqcup$ | 1                       | +                                       | <b>—</b> | 13B        | $\sqcup$         | $\bot$       |              | Ш                     | _        | 4        | —        |
| 1   | $\vdash$ | 39<br>40        | Ш              | +       | H              | +        | +      | ⊢                    | $\dashv$  |             | $\vdash$     | 89          | Н        | Н        | $\dashv$ | +                  | +        |                         |   | -        | 139        | $\vdash$         | +            | $\vdash$     | $\dashv$              | -        | +        | +        |
| -   | $\vdash$ | 41              | ₩              | +       | $\vdash$       | +        | +-     | H                    | $\dashv$  |             |              | 90<br>91    | H        | $\dashv$ | $\dashv$ | +                  | Н        | $\dashv$                | -+-                                     | -        | 140<br>141 | ⊢┼               | +            | $\vdash$     | ${oldsymbol{ecture}}$ | -        | +        | +        |
| 1   | $\vdash$ | 41              | ₩              | +       | H              | +        | +      | $\vdash$             | $\dashv$  |             | $\vdash$     | 92          | Н        | $\dashv$ | $\dashv$ | +                  | Н        | -+                      | ++                                      | -        | 141        | $\vdash \vdash$  | +            | $\vdash$     | Н                     | -        | +        | +        |
|     |          | 43              | ##             | $\top$  | Н              | +        | 十      | H                    | $\neg$    | ı           | $\vdash$     | 93          | Н        | $\neg$   | +        | +                  | H        | $\dashv$                |   | <b>—</b> | 143        | <del>     </del> | +-           | -            | H                     | $\dashv$ | +        | -        |
|     |          | 44              | 111            |         | $\sqcap$       | $\top$   | 1      | $\Box$               | $\neg$    | į           |              | 94          | П        | П        | 7        | 1                  | П        | $\dashv$                | 11                                      |          | 144        |                  | $\top$       | Г            | H                     | 7        | 十        | $\top$   |
| 1   |          | 45              | Ш              | $\perp$ |                | 土        | I      |                      |           | j           |              | 95          |          |          |          | 工                  |          |                         |   |          | 145        |                  | I            |              |                       | ╛        | 丁        | 丁        |
| -   |          | (46)            | Ш              |         | П              | $\perp$  | L      | $\Box$               |           |             |              | 98          |          |          | $\perp$  | $oldsymbol{\perp}$ | $\Box$   | $oldsymbol{\mathbb{I}}$ |   |          | 146        |                  | $\mathbf{I}$ |              |                       | $\Box$   | $\Box$   |          |
| 1   |          | 47              | Ш              | 1       | П              | $\perp$  | 1      | Ц                    | _         | -           |              | 97          | Ш        |          | 4        | 4                  | $\sqcup$ |                         | П                                       |          | 147        | $\Box$           | $\perp$      |              | П                     | 耳        |          | $\bot$   |
| 1   | <u> </u> | 48              | ##             |         | $\sqcup$       | +        | +      | $\vdash$             | _         |             |              | 98          | ш        | $\dashv$ | +        | +                  | ╀┤       | +                       | +                                       | <u> </u> | 148        | $\vdash \vdash$  | +            | -            | Н                     | -        | 4        | +        |
| -   | -        | 49              | #              | +       | ₩              | +        | +-     | ${oldsymbol{arphi}}$ | $\dashv$  |             | -            | 99<br>100   | $\vdash$ | $\dashv$ | $\dashv$ | +                  | $\vdash$ | $\dashv$                | +-1                                     | <u> </u> | 149<br>150 | ┝╌┝              | +-           | $\vdash$     | Н                     | -1       | +        |          |
|     |          | (50)            | IZA.           |         |                |          |        |                      |           | 1           |              | 100         |          | لـــا    |          |                    | ш        |                         | ئــــــــــــــــــــــــــــــــــــــ | L        | 1 130      | டட               | 1            | 1            | ш                     |          | _        |          |